

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of forming a powder compact comprising:
applying a higher fatty acid lubricant which is dispersed into water containing a surfactant to an inner surface of a heated die which is heated to the melting point or less of said higher fatty acid lubricant; and

filling metal powder into said die and compacting said metal powder under such a pressure that said higher fatty acid lubricant is chemically bonded with said metal powder to form a metallic soap coating which is different from said higher fatty acid lubricant.

Claim 2 (Previously Presented): The method of forming a powder compact of claim 1, wherein said higher fatty acid lubricant is a metal salt of a higher fatty acid.

Claim 3 (Previously Presented): The method of forming a powder compact of claim 2, wherein said metal salt of a higher fatty acid is a lithium salt, a calcium salt, or a zinc salt of a higher fatty acid.

Claims 4-5 (Canceled).

Claim 6 (Currently Amended): The method of forming a powder compact of claim [[5]] 1, wherein said higher fatty acid lubricant has a maximum particle diameter of less than 30 μm .

Claim 7 (Previously Presented): The method of forming a powder compact of claim 1, wherein said heated die has a temperature of 100 °C or more.

Claim 8 (Canceled).

Claim 9 (Previously Presented): The method of forming a powder compact of claim 1, wherein said metal powder has been heated.

Claim 10 (Previously Presented): The method of forming a powder compact of claim 1, wherein said metal powder comprises iron powder.

Claim 11 (Previously Presented): The method of forming a powder compact of claim 1, wherein said metal powder further comprises said higher fatty acid lubricant.

Claim 12 (Previously Presented): The method of forming a powder compact of claim 10, wherein said metal powder further comprises said higher fatty acid lubricant.

Claim 13 (Previously Presented): The method of forming a powder compact of claim 11, wherein said metal powder comprises 0.1% or more by weight of said higher fatty acid lubricant.

Claim 14 (Previously Presented): A method of forming a powder compact comprising:

applying a metal salt of higher fatty acid to an inner surface of a die heated to 100°C or more; and

charging iron powder into said die and compacting said iron powder at a pressure of 600 MPa or more.

Claim 15 (Currently Amended): The method of forming a powder compact of claim ~~[[13]]~~ 14, wherein said metal salt of a higher fatty acid is a lithium salt, a calcium salt or a zinc salt of a higher fatty acid.

Claim 16 (Currently Amended): The method of forming a powder compact of claim ~~[[13]]~~ 14, wherein said iron powder is compacted at a pressure of 785 MPa or more.

Claim 17 (Previously Presented): A method of forming a powder compact, comprising:
applying, to an inner surface of a die which has been heated to a die temperature of 100°C or more, a dispersion fluid in which a metal salt of a higher fatty acid having a higher melting point than said die temperature is finely dispersed, thereby forming a coating of said metal salt of a higher fatty acid;

filling iron powder into said die and compacting said iron powder under a compacting pressure of 600 MPa or more, thereby providing a compact having a metallic soap coating on a surface which is in contact with said die; and

ejecting and taking out said compact from said die.

Claim 18 (Previously Presented): A method of forming a powder compact comprising:
applying, to an inner surface of a die which has been heated to a die temperature of 100°C or more, a dispersion fluid in which a metal salt of a higher fatty acid having a higher melting point higher than said die temperature is finely dispersed, thereby forming a coating of said metal salt of a higher fatty acid;

filling iron powder into said die and compacting said iron powder under a compacting pressure of 600 MPa or more, thereby providing a compact having a metallic soap coating on a surface which is in contact with said die; and

ejecting and taking out said compact from said die with an ejecting pressure of 3% or less of said compacting pressure.

Claim 19 (Currently Amended): The method of forming a powder compact of claim [[16]] 17, wherein said compacting pressure is 686 MPa or more and said powder compact is removed from a die with an ejecting pressure of 8 MPa or less.

Claim 20 (Currently Amended): The method of forming a powder compact of claim [[16]] 17, wherein said compacting pressure is 700 MPa or more and ~~said~~ having an ejecting pressure is of 15 MPa or less.

Claim 21 (Currently Amended): The method of forming a powder compact of claim [[16]] 17, wherein said compacting pressure is 700 MPa or more and ~~said~~ having an ejecting pressure is of 13 MPa or less.

Claim 22 (Currently Amended): The method of forming a powder compact of claim [[16]] 17, wherein said compacting pressure is 700 MPa or more and ~~said~~ having an ejecting pressure is of 10 MPa or less.

Claim 23 (Previously Presented): The method of forming a powder compact of claim 17, wherein said metal salt dispersed in said dispersion fluid has a maximum particle diameter of 30 μm or less.

DISCUSSION OF THE AMENDMENT

Claim 1 has been amended by incorporating the subject matter of Claims 4, 5 and 8, therein, and by reciting that the metallic soap coating is different from the higher fatty acid lubricant, which is supported, inferentially, by, for example, paragraph [0041].

Claims 15, 16 and 19-22 have been amended as sought to be amended by the Examiner's Amendment dated February 12, 2003, prior to withdrawal of this application from issue by decision entered November 13, 2003.

No new matter is believed to have been added by the above amendment. Claims 1-3, 6, 7, and 9-23 remain pending in the application.